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EXAMINER	
MOORE, IAN N	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/779,012	FLANAGAN ET AL.	
	Examiner	Art Unit	
	Ian N. Moore	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-11 and 13-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-11,13-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The drawing (**FIG. 2**) was received on 10-18-2004. The drawing is accepted by the examiner since it now shows "**a second processor**" as set forth in the claims 1 and 9.

2. Applicant also amended the specification in order to reflect the drawing in page 4. However, such amendments raise U.S.C 112, second paragraph as set forth below.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-3,5-11,13-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites, "...**said apparatus comprising**: ...**a first processor for collection data on packet loss**...**a second processor for evaluating the packet loss data** ..." in line 6-8. It is unclear where whether "a first processor" and "a second processor" are located in "one apparatus/system" or "separate apparatus/system".

Applicant amended the drawing (FIG. 2) and specification (page 4, lines 14-15) to show that **"a second processor 213" is incorporated in terminal 202**, and accordingly examiner assumes that **a first processor, "processor 212", is incorporated in the gateway 210** (i.e. a first processor incorporated in a gateway is performing collection data on packet loss, and the second processor incorporated in a terminal is evaluating the packet loss data). However,

according to the of claim "said apparatus" comprises both "a first processor" and "a second processor"; also according to specification page 7, lines 10-20 and FIG. 4, "a single processor" is performing both "first processor" and "second processor" functionalities at "one apparatus/system". Thus, there is inconsistency and un-clarity between page 4 of newly amended specification that describes the system/apparatus and FIG. 2) and page 7 of the specification that describes the method steps (which also corresponds to the claims).

Claim 9 is also rejected for the same reason as stated above in claim 1.

Claims 2,3,5-11,13-22 are also rejected since they are depended upon above rejected claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-3,9-11,18,19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung'957 in view of Qureshi (U.S. 6.747.953) and Cheng (U.S. 6,745,352).

Regarding Claims 1,2,9 and 10, Cheung'957 discloses an apparatus (see FIG. 2, VoIP System; see col. 5, lines 25-26), for blocking the routing of voice calls over an Internet protocol (IP) network (see FIG. 2, IP network 140) when a packet loss measure rises above a threshold, said apparatus comprising:

a terminal (see FIG. 2, Telephony Station 111) configured to transmit voice calls (see col. 5, lines 30-35; note that the telephony station includes a conventional telephone, a personal

computer system, a wireless telephone station and etc.), said terminal being connected to the IP network (see FIG. 2, Telephony Station 111 is connected to IP network 23 via PBX 110 and Administration Control Gateway 100; see col. 5, lines 24-38);

a first processor (see FIG. 3, a combined system of processor 250, call quality requirements data structure 220 and IP network performance characteristics data structure 230 which performs a specific collecting/storing function) for collecting data on packet quality (see col. 4, lines 20-29; call quality requirement is the packet quality/loss) for each of a plurality of nonoverlapping time interval (see col. 7, line 64 to col. 8, line 4; where collection/queuing and determination is performed/updated every t_k seconds) in a current connection path over the IP network (see col. 6, lines 46 to col. 7, lines 35; see col. 9, lines 36-42; note that the combined system collects/stores/queues the current and/or projected pack loss quality requirement parameter/data over the specific time period in every t_k second (i.e. the packet loss rate or error rate must be determined and measured for each of a plurality of every t_k seconds interval/period since rate is calculated over the time) in a current connection path/route (i.e. storing/collection/queuing is performed for each current quality data, thus it is clear that it is collecting/storing for current path/route) over the IP network);

a second processor (see FIG. 3, a combined system of processor 250 and dynamic Call admission instructions 240 which performs a specific determining/evaluation function) for evaluating the packet quality data according to a predetermined algorithm (see FIG. 5, algorithm that performs the methods/steps of determining/evaluating the quality requirements (i.e. packet loss); see col. 7, lines 36 to col. 8, lines 25), wherein said algorithm computes said evaluation of

packet loss data for each time interval as a function of the packet loss data (see col. 7, line 64 to col. 8, line 14; $\rho(t_k)<\rho_{maximum}$, where ρ is packet loss; and t_k time interval); and further

wherein if the results of said evaluation fail to meet a predetermined criterion (see FIG. 5, Steps 560 and 570; when the output of steps 560 and 570 does not meet the threshold criteria), the calls over the IP network path are blocked (see FIG. 5, step 575, the current call and next/future calls through IP packet switch network is stopped/blocked by re-directing/sending through circuit switch network, as long as call quality requirement does not the threshold criteria); see col. 8, lines 47 to col. 9, lines 11, 34-50;

wherein the functions of the first and second processors are performed by a single processor (see FIG. 3, Processor 250; note that the each function/processing (i.e. first and second processors, or processing systems) is performed a single processor 250; see col. 6, lines 24-28).

Cheung'957 does not explicitly disclose the packet loss and future calls.

However, the above-mentioned claimed limitations are taught by Qureshi'953. In particular, Qureshi'953 teaches collecting data on packet loss for each of a plurality of time interval in a current connection path (see col. 15, lines 38-50, 60-67 to col. 16, lines 20, 29-42; see FIG. 7A, step 700; see col. 18, lines 28-36; note that the system collects/measures data for the packet loss for each of a time interval in the active/current call),

evaluating the packet loss data according to a predetermined algorithm (see FIG. 7B, step 725; see col. 18, lines 65 to col. 19, lines 5; note that the packet loss data is determined/evaluated according to the method/algorithm in FIG. 7),

wherein if the results of said evaluation fail to meet a predetermined criterion (see FIG. 7B, Step 725, determining if the average packet loss A_{LC} is no longer less than the packet loss threshold criterion (L_t); see col. 19, lines 1-5),

future calls are blocked (see FIG. 7B, Step 729, Reject New Calls; see col. 19, lines 5-10; note that upon determination, future/new calls are blocked/rejected).

In view of this, having the system of Cheung'957 and then given the teaching of Qureshi'953, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Cheung'957, for the purpose of providing algorithm which utilizes past interval/interaction and current interval/iteration when computing the result, as taught by Qureshi'953, since Qureshi'953 states the advantages/benefits at col. 2, lines 54 to col. 3, lines 12 that it would provide a mechanism for determining the congestion and level of call blocking needed to provide a predetermined quality of service for calls. The motivation being that by taking the corrective action of blocking the new/future calls according to the packet loss data, it can reduce or eliminate data loss.

Neither Cheung'957 nor Qureshi'953 explicitly discloses wherein said algorithm computes each time interval as a function of the data for at least one prior interval. However, the above-mentioned claimed limitations are taught by Cheng'352. In particular, Cheng'352 discloses a plurality of nonoverlapping time intervals (see col. 5, line 33 to col. 6, line 10; rates are determined in every time interval (i.e. nonoverlapping time interval)) and wherein said algorithm computes each time interval as a function of the data for that interval and at least one prior interval (see col. 5, line 33-60, see col. 6, lines 7-43; note that sliding window averaging

algorithm utilizes each time/number of interval/iterations as a average data for past interval/iteration and the current interval/iteration to compute the average result/data).

In view of this, having the combined system of Cheung'957 and Qureshi'953, and then given the teaching of Cheng'352, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Cheung'957 and Qureshi'953, for the purpose of providing algorithm which utilizes past interval/interaction and current interval/iteration when computing the result, as taught by Cheng'352, since Cheng'352 states the advantages/benefits at col. 1, lines 25-45 that it would provide accurate and reliable error rate estimation which adapts to channel condition changes. The motivation being that by estimating the error rate accurately, it can increase the capability to detect and correct the errors, thereby increasing the network reliability and performances.

Regarding Claims 3 and 11, Cheung'957 discloses wherein the calls over the IP network path are blocked for a prespecified duration (see col. 9, lines 6-11, 35-44, 55-57; note that call quality requirements are measured/collected an updated periodically to ascertain the quality requirements. Thus, the calls are redirected through the circuit switch network for a predetermined duration, which is the duration that the quality requirement does not met/satisfied the threshold).

Qureshi'953 also discloses wherein the calls are blocked for a prespecified duration (see col. 19, lines 1-30; note that the calls are rejected/blocked for the predefined/pre-set duration of the packet loss exceeding the threshold set by the system administrator. Thus, it is clear that the calls are blocked for a predefined duration/period.)

In view of this, having the system of Cheung'957 and then given the teaching of Qureshi'953, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Cheung'957, for the same purpose and motivation as described above in claim 1 and 9.

Regarding Claim 18, Cheung'957 discloses wherein data on packet loss are collected simultaneously on multiple connections over the IP network (see col. 6, lines 4-11, 52 to col. 7, lines 10, see col. 9, lines 38-42; note that the call quality requirements (i.e. packet loss) are monitored and stored/collected concurrently/simultaneously for each connection/call since more than one call/connection is being processed by the admission control gateway. It is also clear that Admission Control Gateway handles and process multiples calls/connections concurrently over the IP network.)

Regarding Claim 19, Cheung'957 discloses wherein data from different connections are evaluated separately (see col. 5, lines 15-24; col. 6, lines 60 to col. 7, lines 10; note that the call quality requirements data are stored in a lookup that specifies certain call quality requirement for certain types of calls, specific calling parties, specific called parties, etc. since call quality requirement is varied for each type of call. Thus, it is clear that different types of calls/connection are monitored and determined/evaluated separately/differently according to the lookup table, which specified separate/different types of requirements).

Regarding Claim 22, Cheung'957 discloses wherein data from different connections are pooled (see col. 5, lines 15-24; col. 6, lines 60 to col. 7, lines 10; note that the call quality requirements data are stored in a lookup table. Thus, it is cleared that the different calls/connections data are pooled/shared the same look up table).

7. Claim 5,8,13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung'957, Qureshi'953 and Cheng'352, as described above in claim 4, and further in view of Esaki (U.S. 5,153,877).

Regarding claims 5, 8, 13 and 16, the combined system of Cheung'957, Qureshi'953, and Cheng'352 discloses the packet loss datum as described above in claim 4. Cheng'352 discloses wherein the function is an average (see Cheng'352 col. 5, line 33-60, see col. 6, lines 7-43; note that sliding window averaging algorithm is the average function since it is determined over number of iteration from the past and current.) Cheng'352 further discloses in which said average for an interval is the average of the datum for said interval and the value of said average for the prior interval (see Cheng'352 col. 5, line 33-60, see col. 6, lines 7-43; note that sliding window averaging algorithm utilizes each time/number of interval/iterations as a average data for past interval/iteration and the current interval/iteration to compute the average result/data).

Neither Cheung'957, Qureshi'953, nor Cheng'352 discloses a weighted average (see Esaki'877 col. 14, lines 20-67 to col. 15, lines 10; note that packet/cell loss rate is estimated by using a weighted average during the period T.)

However, the above-mentioned claimed limitations are taught by Esaki'877. In view of this, having the combined system of Cheung'957, Qureshi'953 and Cheng'352, and then given the teaching of Esaki'877, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Cheung'957, Qureshi'953 and Cheng'352, for the purpose of providing weighted average mechanism, as taught by Esaki'877, since Esaki'877 states the advantages/benefits at col. 2, lines 59-67 that it would provide a packet

network in which the packet loss rate can be estimated/averaged with reduced amount of calculation. The motivation being that by utilizing the weighted average method, it can reduce the calculation burden in the network thereby increasing throughput and processing speed.

8. Claims 6, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung'957 and Qureshi'953, as applied to claims 1 and 9 above, and further in view of Wellard (U.S. 6,510,219).

Regarding claims 6 and 14, the combined system of Cheung'957 and Qureshi'953 discloses in which said blocking is done only if said packet loss data have been collected as described above in claims 1 and 9.

Neither Cheung'957 nor Qureshi'953 explicitly disclose which said blocking according to a prespecified minimum call duration.

However, the above-mentioned claimed limitations are taught by Wellard'219. In particular, Wellard'219 teaches which said blocking is done only if said loss data have been collected for a prespecified minimum call duration (see FIG. 2, Steps 180,190,200,210, 220, 230 and 240; note that blocking/stopping to transmit via 1st network is done (i.e. step 230 and 240) only if the transmission errors (i.e. packet loss, delay packet, corrupted packet; see col. 1, lines 39-46) have been collected for a predetermined call duration (i.e. a duration between 1st threshold crossing determination interval and 2nd threshold crossing determination interval). Wellard'219 teaches that upon monitoring/collection loss/errors and detecting that it is below the threshold, the system does not block the call immediately. It continues monitors/collects the error

for a duration/period during the call, and then blocking is performed by switching the call to 2nd network); see col. 2, lines 59 to col. 3, lines 25; 40-45, 50-67, see col. 4, lines 1-65).

In view of this, having the combined system of Cheung'957 and Qureshi'953, then given the teaching of Wellard'219, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Cheung'957 and Qureshi'953, for the purpose of providing algorithm which utilizes past interval/interaction and current interval/iteration when computing the result, as taught by Wellard'219, since Wellard'219 states the advantages/benefits at col. 2, lines 1-20, 35-42 that it would provide a mechanism for transparently re-routing the call upon from QoS of unreliable network to a different network. The motivation being that by rerouting the call between the networks, it can increase the customer satisfaction since QoS of the call will be maintained.

Regarding claim 20, the combined system of Cheung'957 and Qureshi'953 discloses wherein evaluated connection is consulted to determine whether to block calls as described above in claim 9.

Neither Cheung'957 nor Qureshi'953 explicitly disclose wherein the most recently evaluated connection is consulted.

However, the above-mentioned claimed limitations are taught by Wellard'219. In particular, Wellard'219 teaches wherein the most recently evaluated connection (see FIG. 2, Step 190. 200, 220, and 230; a connection/call that is determined to fall below 1st threshold, and in the process of continuing monitoring) is consulted to determine whether to block calls (see FIG. 2, step 240; a call, which most recently have been determined that it is below 1st threshold, is

checked/consulted to determine whether or not it passes 2nd threshold in order to block/switch the call); see col. 2, lines 59 to col. 3, lines 25; 40-45, 50-67, see col. 4, lines 1-65).

In view of this, having the combined system of Cheung'957 and Qureshi'953, then given the teaching of Wellard'219, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Cheung'957 and Qureshi'953, for the same purpose and motivation as described above in claim 14 above.

9. Claim 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung'957 and Qureshi'953, as applied to claim 1 and 9 above, and further in view of Dawson (U.S. 5,390,188).

Regarding claims 7 and 15, the combined system of Cheung'957 and Qureshi'953 discloses if in any interval, the collected packet loss datum exceeds a prespecified limiting value (see Cheung'957 FIG. 5, Steps 560 and 570; when the output of steps 560 and 570 does not meet the threshold criteria; see Qureshi'953 FIG. 7) as described above in claims 1 and 9.

Neither Cheung'957 nor Qureshi'953 explicitly disclose said the packet loss is represented by said value (see Dawson'188 col. 29, lines 51 to col. 31, lines 25; note that a packet loss represents by the value).

However, the above-mentioned claimed limitations are taught by Dawson'188. In view of this, having the combined system of Cheung'957 and Qureshi'953, then given the teaching of Dawson'188, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Cheung'957 and Qureshi'953, for the purpose of providing algorithm which utilizes past interval/interaction and current

interval/iteration when computing the result, as taught by Dawson'188, since Dawson'188 states the advantages/benefits at col. 31, lines 25-30, 45-49 that it would provide a mechanism for fault detection and isolation techniques with respected to messages by utilizing the packet loss representative value. The motivation being that by rerouting the call between the networks, it can increase the customer satisfaction since QoS of the call will be maintained.

10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung'957 and Qureshi'953, as applied to claim 9 above, and further in view of Esaki (U.S. 5,153,877).

Regarding claim 21, the combined system of Cheung'957 and Qureshi'953 discloses wherein evaluation across current connection is consulted/verified/checked to determine whether to block calls as described above in claim 9.

Neither Cheung'957 nor Qureshi'953 explicitly disclose an average (see Esaki'877 col. 14, lines 20-67 to col. 15, lines 10; note that packet/cell loss rate is estimated by using a weighted average during the period T.)

However, the above-mentioned claimed limitations are taught by Esaki'877. In view of this, having the combined system of Cheung'957 and Qureshi'953, then given the teaching of Esaki'877, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Cheung'957 and Qureshi'953, for the purpose of providing weighted average mechanism, as taught by Esaki'877, since Esaki'877 states the advantages/benefits at col. 2, lines 59-67 that it would provide a packet network in which the packet loss rate can be estimated/averaged with reduced amount of calculation. The

motivation being that by utilizing the weighted average method, it can reduce the calculation burden in the network thereby increasing throughput and processing speed.

Allowable Subject Matter

11. **Claim 17** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

12. Applicant's arguments filed 10-18-2004 have been fully considered but they are not persuasive.

Regarding claims 1-3,5-11,13-16,18-22, the applicant argued that, "...Cheung does not spell out what specific time period is covered by each sample...Cheung covers periods are the periods covered are overlapping... Qureshi uses a running average (e.g. overlapping time interval)...but it does not teach any time sequence of packet loss data for different intervals...Qureshi nowhere discuss a means to maintain service in the face of transitory quality problems...Cheng does not teach the limitations of Applicant claims...Cheng is not concerned with packet loss and nowhere mentions packets or packet loss..." in page 11, paragraph 2-3; page 12, paragraph 2; page 13, paragraph 2; page 14.

In response to applicant's argument, the examiner respectfully disagrees with the argument above. Cheung discloses nonoverlapping time interval (see col. 7, line 64 to col. 8, line 4; where collection/queuing and determination is performed/updated every t_k seconds, and if

performing/updating is performed in every t_k seconds, clearly it is performed in "nonoverlapping time interval").

In response to the argument on Qureshi, Cheung already discloses the nonoverlapping time interval as set forth above, and the rejection is based upon the combined system of Cheung and Qureshi. Thus, it is clear that the combined system of Cheung and Qureshi discloses the argued "nonoverlapping time intervals". Qureshi clearly discuss "a means to maintain service in the face of transitory quality problems" in FIG. 7A and 7B, where RTP measurement on packet loss is performed, evaluating in accordance with acceptable thresholds, and blocking the calls if they are not acceptable as set forth in the above rejection.

In response to the argument on Cheng, Cheng discloses an algorithm computes each time interval as a function of the data for that interval and at least one prior interval (**see col. 5, line 33-60, see col. 6, lines 7-43; note that sliding window averaging algorithm utilizes each time/number of interval/iterations as a average data for past interval/iteration and the current interval/iteration to compute the average result/data**). Both combined system of Cheung and Qureshi measuring and determining packet loss, and the rejection is based upon the combined system of Cheung and Qureshi. Thus, it is clear that the combined system of Cheung, Qureshi and Cheng discloses all argued claimed limitation as set forth in the above rejection.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Regarding claims 1-3,5-11,13-16,18-22, the applicant argued that, "...applicant disagree that Qureshi provides a motivation to modify Cheung to create Applicant's invention...the claimed invention is not obvious over Cheung in view of Qureshi..." in page 12, paragraph 2-3.

In response to applicant's argument, the examiner respectfully disagrees with the argument above.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Qureshi'953 states the advantages/benefits/motivation at **col. 2, lines 54 to col. 3, lines 12** that it would **provide a mechanism for determining the congestion and level of call blocking needed to provide a predetermined quality of service for calls**, and by taking the corrective action of blocking the new/future calls according to the packet loss data, it can reduce or eliminate data loss. (Emphasis added)

In response to applicant's argument that it is not obvious to combine, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642

F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, the motivation is clearly recited as set forth in above response.

Regarding claims 1-3,5-11,13-16,18-22, the applicant argued that, "...Cheng teaches a method of estimating error rates that nowhere relies on direct measurement of error or data loss, it teaches away from Applicants' system..." in page 13, paragraph 2.

In response to applicant's argument, the examiner respectfully disagrees with the argument above. Cheung discloses the argued claimed limitation as set forth in above response. Moreover, applicant's "a predefined algorithm" (i.e. sliding window algorithm in light of the specification), **which is also well known in the art,** to evaluate at each time interval as a function as a function of the data for that interval and at least one prior interval is clearly disclosed by Cheng. Cheng's data is evaluated for frame error or bit error, which are determined over nonoverlapping time intervals as rates (i.e. bit error rate or frame error rate). Thus, **Cheng does not teach away from applicant's system**. Moreover, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

Regarding claims 5,8,13,16, the applicant argued that, "...Esaki does not disclose a weighted average that concerns packet loss data...and does no render any claims obvious in combination with cited art..." in page 14, paragraph 1.

In response to applicant's argument, the examiner respectfully disagrees that the argument above. Esaki a weighted average (see Esaki'877 col. 14, lines 20-67 to col. 15, lines 10;

note that packet/cell loss rate is estimated by using a weighted average during the period T. Thus, it is clear that Esaki is concerned with packet loss data). In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Regarding claims 6,14,20, the applicant argued that, "...Wellard does not supply the limitation lacking in Cheung and Qureshi and accordingly does not render any claims obvious in combination with cited art..." in page 14, paragraph 1.

In response to applicant's argument, the examiner respectfully disagrees that the argument above. Wellard teaches which said blocking is done only if said loss data have been collected for a prespecified minimum call duration (see FIG. 2, Steps 180,190,200,210, 220, 230 and 240; note that blocking/stopping to transmit via 1st network is done (i.e. step 230 and 240) only if the transmission errors (i.e. packet loss, delay packet, corrupted packet; see col. 1, lines 39-46) have been collected for a predetermined call duration (i.e. a duration between 1st threshold crossing determination interval and 2nd threshold crossing determination interval). Wellard'219 teaches that upon monitoring/collection loss/errors and detecting that it is below the threshold, the system does not block the call immediately. It continues monitors/collects the error for a duration/period during the call, and then blocking is performed by switching the call to 2nd network); see col. 2, lines 59 to col. 3, lines 25; 40-45, 50-67, see col. 4, lines 1-65). In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In view of the above, **the examiner respectfully disagrees** with applicant's argument and believes that the combination of references as set forth in the 103 rejections are proper.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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